



MX Disc Publisher

For Microsoft Windows® 7, Vista, and XP

Users Manual

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Introduction

The MX Disc Publisher is a robust automated inkjet CD and DVD disc publishing solution. The MX Disc Publisher Series includes the MX-1 and the MX-2. The MX-1 has a single recording drive, while the MX-2 has 2 recording drives for added throughput.

Both MX Disc Publisher models have a 100-disc capacity, making the task of burning and printing large numbers of discs fast, easy and hands-free.

Fully Integrated Automation

Microboards combined their patented auto-loading system with HP's new inkjet printer engine to give users the highest output possible, both in image resolution and print speed. Since the MX Disc Publisher is an autoloading system, no calibration of robotics or manual feeding of discs is required. The MX Disc Publisher connects by a single USB 2.0 interface to your computer, and comes with burning software and label design software.

Flexibility and Speed for Any Application

While the MX Disc Publisher was designed to fill a need in the high-volume arena, it also has the ability to print at 4800 x 1200 dpi on both DVD and CD media. With the included design software, users can enjoy its benefits whether making a few discs or a few hundred.

What's Included

When unpacking your MX Disc Publisher system, the following items should be included:

- MX Disc Publisher print system
- MX Disc Publisher Quick Start Guide
- MX Unpack Guide
- Users Manual (This document)
- Power Cord
- USB 2.0 Printer Cable
- Blank Printable CD's
- Input Bin rods
- 100 disc output assembly

- Microboards Disc Publisher Install CDs, 32-bit and 64-bit (Discs include Windows drivers, Printer Toolbox, Disc Publishing software, and SureThing Label software).
- 1 each: Microboards PFP-HC-CYAN, PFP-HC-MAGENTA, PFP-HC-YELLOW, and PFP-HC-BLACK Ink cartridges
- 1 each: CG316A (Yellow and Black) and C9382A (Cyan and Magenta) printheads

If any of these items are missing, please contact your distributor or Microboards Technology Technical Support department at 952-556-1639.

The MX Disc Publisher installation disc includes an Installer that will walk you through the process step by step. Please perform the installation in order as specified in the Installer before connecting to a computer.

System Requirements

The Microboards MX Disc Publisher has the following minimum requirements and compatibilities:

Supported Operating Systems

Windows 7, Vista or XP with SP2. 32-bit or 64-bit.

Processor

Pentium 4 (or equivalent) CPU, running at 3.0 GHz or faster.

System Memory

Minimum 1 GB of system memory.

Hard Drive Space

Approximately 180MB of free space is required on the system hard drive for the applications and drivers.

A separate internal 7200 RPM hard drive is recommended for storing your data. Using the same hard drive as the operating system can cause the system to perform slowly.

USB Connection

USB 2.0 is required.

Assembly and Installation

Assembly Instructions

MX Disc Publisher Assembly

Remove the MX Disc Publisher system from the shipping box and confirm you received all of the items.

Place the MX Disc Publisher on a stable, flat surface. You will need room both in front and behind the system, as discs will be accessed from both locations.

Install the 2 long input bin posts above the input hopper, with the wide post to the right (shipped installed).

Install the output bin:

- Align the two holes in the output bin with the holes on the Front of the printer (numbers 1 and 2).
- Secure the output bin with the two thumb screws.
- The output bin should now be securely in place.
- Next, slide in the 100 disc output spindle into place.

The Output Bin is designed to hang over the front edge of your work surface.



Installing Ink Cartridges and Print Heads

Supported Ink Cartridges

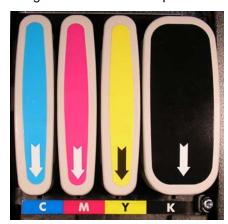
The MX Disc Publisher uses 3 color and 1 black ink cartridges. The part numbers for these cartridges are PFP-HC-CYAN, PFP-HC-MAGENTA, PFP-HC-YELLOW, and PFP-HC-BLACK. If other cartridges are installed, the MX Disc Publisher will not function. These cartridges are available from any Microboards reseller.

Refill kits or non-Microboards ink cartridges are not recommended for use in the MX Disc Publisher system. Use of non-Microboards cartridges will cause the printer to fail. Use of refilled cartridges may cause the MX Disc Publisher to fail.

Loading / Replacing Ink Cartridges

Cartridges can be changed while the MX Disc Publisher is on, but it should never be turned on without an ink cartridge in place. An LED will light above any cartridge that needs to be replaced.

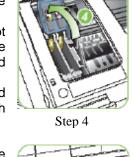
- Lower the ink door.
- If replacing an empty ink cartridge, remove the color that needs changing by pulling straight out.
- Remove each new print cartridge to be installed from its packaging.
- Slide the correct ink cartridge into the correct slot with the arrows pointing down, as shown to the right.
- Raise the ink door and latch it back into place. The printer will be ready after the ink cartridges pressurize and the Media Feed button LED goes out.



Installing / Replacing Printheads

The 2 Printheads are not installed when you receive the MX Disc Publisher, and must be installed prior to using the printer. The printhead models are CG316A (yellow and black) and C9382A (cyan and magenta).

- 1. Raise the top Printhead Access Door.
- 2. If you are setting up the MX Disc Publisher for the first time, remove any packaging materials from around the printhead carriage.
- 3. If you are replacing printheads and the printhead carriage is not parked all the way to the left, turn on the MX Disc Publisher. With the Printhead Access Door opened, press and hold the Media Feed button until the carriage moves to the left and locks into position.
- 4. Lift the cradle latch. If you are replacing the currently installed printheads, remove the printheads by lifting the blue handle of each and gently pulling up on each handle.
- 5. Remove the printheads from the packaging.
- 6. Gently shake each printhead 6 times prior to removing the orange protective caps. Save the caps! If you remove the printheads from the MX Disc Publisher, they should be recapped to avoid clogging the printheads and ink valves.
- 7. Gently press the printheads into the cradle, installing the correct printhead in the correct slot. **DO NOT FORCE THE PRINTHEADS INTO PLACE.**
- 8. Lower the cradle latch carefully.
- 9. Lower the top Printhead door. The printhead carriage will return to the right and will be primed by the printer if the power is on.





Step 7

Loading Discs

The next step is to load your MX Disc Publisher with output discs. The system will accept CD or DVD 120 mm (12 cm) inkjet printable discs. If the disc does not have an inkjet printable surface, the ink will not adhere to the surface of the disc. The MX Disc Publisher will only accept 12 cm discs. Business card or 8 cm discs are not supported by this system.





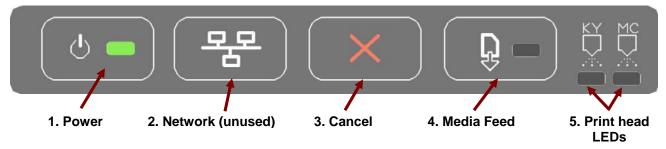
Figure 1 Figure 2

Load the first 5 or 6 discs flat, as seen in figure 1.

Load the rest of the discs at an angle, against the wide input rod, as seen in figure 2.

The MX Disc Publisher will hold a maximum of 100 discs. DO NOT load more than 100 discs in the system, as this may cause the discs to feed incorrectly.

Front Panel Indicators and Buttons



1. Power Button and LED – The Power button turns the MX Disc Publisher on and off. It may take a few seconds for the MX Disc Publisher to turn on after you press the Power button. The green LED on the Power button flashes when the printer is processing.

NOTE: The AC power switch located on the back of the MX Disc Publisher must be turned on first in order to supply power to the Front Panel.

- 2. Network Button This button is unused.
- 3. Cancel Button Pressing the Cancel button cancels the current print job.
- 4. Media Feed Button Pressing this button will clear any media feed issues. This button has an LED that will flash amber when a media feed issue is occurring. It will also show steady amber if either the ink or the upper doors are opened.
- 5. Print Head LEDs These LEDs will be on if there is an issue with either of the print heads.

MX Disc Publisher Installation

The MX Disc Publisher installation disc includes an Installer that will walk you through the process step by step. Please use the Installer and follow the installation steps in order.

The following installation sections are intended only as a reference for the installation process, not as a guide to installing the MX Disc Publisher. Performing the installation out of order could result in an unsuccessful installation.

The MX Disc Publisher Installation Quick Reference Guide will show you the order in which the installation will occur.

Installation should always be done when logged in as a user with full Administrator rights.



Windows Component Prerequisites

During the installation process, your PC will be checked to determine if 2 required Microsoft Windows components are present. If not, these components will be installed. You cannot continue the installation without installing these necessary Microsoft Windows components.

Connecting to a PC

DO NOT CONNECT YOUR MX PRINT FACTORY TO A COMPUTER BEFORE RUNNING THE INSTALLER LOCATED ON THE INSTALLATION DISC!!

The connection between the PC and the Microboards MX Disc Publisher is with one USB cable.

- 1. Confirm that the power is turned OFF on the MX Disc Publisher and on your PC.
- 2. Plug in the AC power cord to the back of the MX Disc Publisher. **Do not turn on power to the MX Disc Publisher until all 4 ink cartridges and both printheads have been installed.**
- 3. Connect the square shaped end of the USB cable to the back of the MX Disc Publisher.
- 4. Connect the flat, rectangular end of the USB cable into a USB 2.0 port in your PC.

USB Cable length exceeding 6 feet between the MX Disc Publisher and the PC is not supported!



Windows 7 and Vista Hardware Installation

The Microboards MX Disc Publisher Installer should always be run when logged in as user with full Administrator rights. This is required for the driver pre-installation to be successful. Once the MX is plugged into the PC via the USB connection, the hardware will automatically be found and installed on your PC.

During the driver pre-installation, you may need to verify that you would like to install the drivers.

If the Installer is run by a user without full Administrator rights, or you do not verify that the drivers should be installed, the hardware will need to be installed using the Hardware Wizard. Please follow the directions below.

Windows XP Hardware Installation

If you are installing the hardware while running the MX Disc Publisher installer, this process will occur automatically. The Windows Found New Hardware Wizard will appear during any hardware installation when not using the Installer. Please follow all directions in the order in which they appear.

Insert the Microboards MX Disc Publisher CD into a drive in your computer. Follow the instructions provided by the installer. Connect the MX Disc Publisher to the PC only when you are prompted to.

The operating system will next display the following windows:



1. Select **No**, **not this time** and click **Next**. The following screen will appear:



2. Click the **Next** button and the files will be copied from the CD.



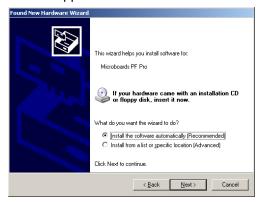
Click Continue Anyway if this message should appear.



4. Click **Finish** for the next step to appear.



5. Select **No, not this time** and click **Next**. The following screen will appear:



6. Click the **Next** button and the files will be copied from the CD.



7. If this screen appears, click Continue Anyway.



8. The Hardware installation is complete.

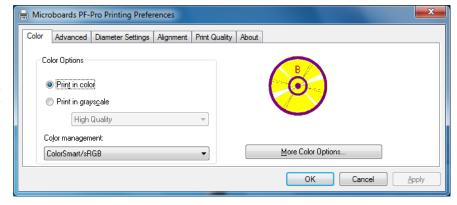
Printing Preferences

Access the Printing Preferences by clicking the **Start** Button on your Windows computer. Select **Settings** and then select **Printers**. Right click on the Microboards PF-Pro icon, then select **Printing Preferences**. There are 6 tabs across the top of the window. Click each tab to see the available settings.



Color Tab

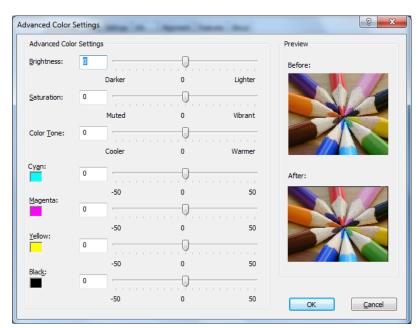
The Color Tab allows you to specify that the entire image should be printed in grayscale, or printed in sepia. You also have access to **More Color Options** from this tab.



More Color Options

Saturation, **Brightness** and **Color Tone** allow you to fine tune your print image.

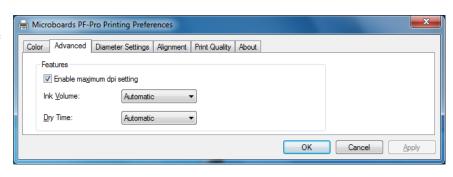
The four ink settings allow you to change the volumes used of each specific ink cartridge.



Advanced Tab

The Advanced Tab allows you to **Enable Maximum dpi setting**, adjust the amount of ink placed on the disc using the **Ink Volume** setting, and adjust the **Dry Time** of the disc.

Enabling the maximum dpi will result in longer times to process your print image, reducing throughput.

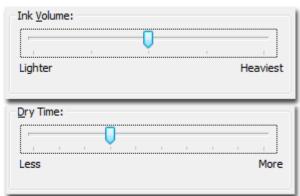


To change the lnk Volume or Dry Time, click the drop-down box and select Change. A window will open with a setting bar for the option selected.

Changing the Ink Volume will affect how quickly you need to replace your ink cartridges, but also affects the quality of the printed output.

Changing the Dry Time can increase or decrease your throughput, but if the Dry Time is set too low, you risk the possibility that the last disc printed will not have dried before the next disc is placed on top of it in the output bin.

The default settings are the recommended settings and should be used unless absolutely necessary. If you choose to increase the Ink Volume, you should also increase the Dry Time.

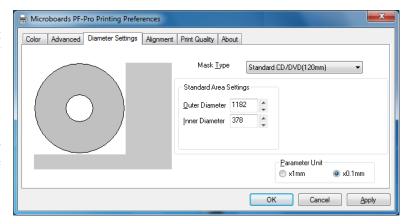


Diameter Settings Tab

The Diameter Settings tab allows you to change the size of the print image to accommodate the variety of printable surface area available on media.

The Outer and Inner **Diameters** will change the size of the area to be printed. To avoid excessive ink buildup, these values should never be set so that the MX Disc Publisher is printing off the media.

The Parameter Unit should remain on the **0.1mm** setting for maximum precision.



You can also select one of the preset **Mask Types** to change the diameter settings.

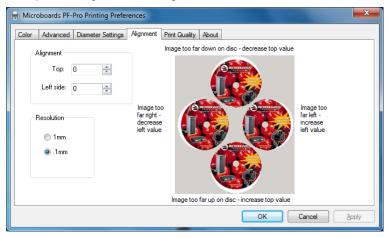
Alignment Tab

The Alignment tab allows you to change the printer alignment settings.

The **Resolution** setting should always be set at **.1mm** for best results.

Alignment values will move the print image on the disc.

Increasing the **Top** alignment value will move the print image down on the disc, while decreasing it will move the image up on the disc. Increasing the **Left** alignment value will move the print image to the right on the disc, while decreasing it will move the image left.



Print Quality Tab

The Print Quality tab controls the print resolution.

Print Quality

- Best
- Normal

Print Modes

- Draft
- Text and Graphics
- Photo



Printing Recommendations

Draft mode is extremely fast, but should only be used for minimal text and no graphics. As this is draft quality, there may be some gaps or overlap in the output.

Text and Graphics mode is used for printing mainly text information and small, simple graphics.

Photo Mode should be used when printing complex graphics or on the entire disc; a quality setting of **Best** is always recommended for any Photo Mode printing.







Text & Graphics - Normal



Text & Graphics - Best



Photo - Best

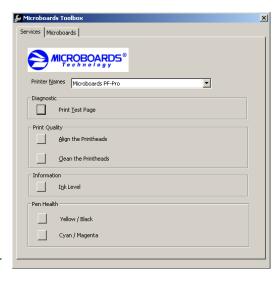
About Tab

The About tab provides you with contact information for the worldwide Microboards offices.

The Microboards Printer Toolbox

Toolbox Icon in Tool Tray

To access the Microboards Toolbox, click the toolbox icon located in the tool tray on the lower right of your desktop. Select the Microboards PF-Pro and click the buttons to access a particular maintenance function of the Toolbox for the selected printer.



Print Test Page

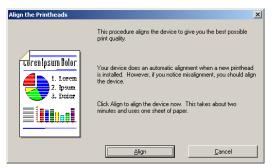
To confirm the computer is communicating with the MX Disc Publisher, print a Test Page. This can be done with one of the inkjet printable CD's included with your MX Disc Publisher, or an inkjet compatible disc you may already have. To print the Test Page:

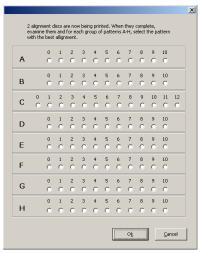
- Click the **Print Test Page** button from the main Toolbox window.
- Place the inkjet printable media into the input hopper.
- Click Print Test Disc.
- A disc will be dropped onto the belts and then printed.
- Once printing is complete, the disc will be ejected into the output hopper.

Align the Printheads

Printhead alignment should be performed when a new printhead is installed. If you experience a decrease in print quality with an installed printhead, you may need to perform this service.

- Click the Align the Printheads button from the main Toolbox window to show the Align the Printheads window, as seen to the right.
- Load 4 pieces of blank, unprinted media into the input hopper.
- Click the Align button, and 2 discs will load to the belts and be printed.
- Use these discs to select the patterns that are best aligned in the next window, as shown to the right. All 8 entries must be made.
- After selecting the patterns with the best alignment, click OK.
- The printhead alignment discs will print again. The best aligned patterns should have moved closer to the center (they do not need to be in the center, only closer to the center than the original set of discs). If so, click Cancel. If not, enter the values from the second set of discs and click OK; you will need to load 2 more blank discs.

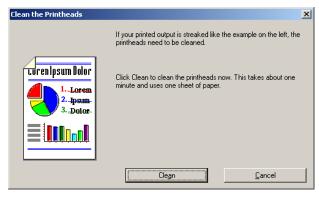




Clean the Printheads

The printheads may require cleaning if the printed images show streaks of color. This may occur if the MX has been idle for an extended period of time.

- Click the Clean the Printheads button on the main Toolbox window.
- Load a blank piece of media into the input hopper before clicking the Clean button. The media will load down to the belts and be printed with the cleaning image.



Running this process more than once may be required if the quality does not improve after cleaning one time.

Printhead Maintenance

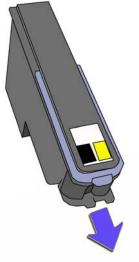
If, after several cleaning attempts, the printed images continue to show streaks of color, you may need to manually clean the printheads. Follow the procedure below exactly to clean the printheads. Not following these steps could result in damaged printheads.

- 1. Remove the printheads from the carriage (please see **Installing/Replacing Printheads**, page 7).
- 2. Use ionized water to lightly dampen a lint-free cloth
- Place the cloth on a level surface
- Holding the printhead with the bottom of the printhead resting lightly on the cloth, gently pull the printhead towards you along the direction of the long axis of the printhead, as shown to the right.

DO NOT MOVE THE PRINTHEAD FROM SIDE-TO-SIDE, AS THIS COULD MIX THE INK COLORS IN THE PRINTHEAD!

- 5. If the printhead does not leave two solid lines of color, one for each color in the printhead, move the printhead to a clean area on the cloth and repeat step 4.
- Carefully replace the printhead into the MX Disc Publisher once the heads have been cleaned.

If you do not follow the above procedure exactly, you could damage your printheads!

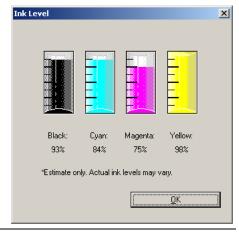


Ink Level

Click the Ink Level button on the main Toolbox window.

The Ink Level of each cartridge can be checked using this button.

Please note that this is an estimate of the current ink levels only.



Pen Health

If you suspect that the printheads are not functioning correctly due to print quality issues, the Pen Health function can be used to determine the health of the 2 printheads. Each test will require one unprinted disc.

The pattern to the right will be printed out in both of the colors of the printhead being tested; magenta and cyan will be on one test, yellow and black on one disc. If the print results are similar to that shown, or with a few breaks in the print that are no wider than the space between the vertical lines, the pen health is still good.

If, however, any of the lines look as they do in the lower image, with multiple gaps in the horizontal lines that are wider



than the distance between the vertical lines, the printheads may need to be cleaned (see page 16).

Run the Pen Health a second time; if the print quality has not improved, the printheads may need to be replaced.

Using SureThing Disc Labeler

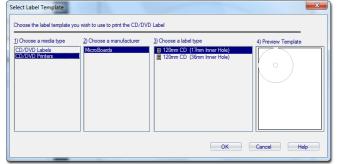
SureThing Disc Labeler is included with the MX Disc Publisher and will be installed during the PF-Pro Installation. For more information on using SureThing, please refer to the SureThing Help menu.

Creating New Labels

Any label you create in SureThing must use the Microboards template to print correctly.

1. To create a new label, either click **New Project** in the Action window on the left, or select **New** from the **File** menu.

- Click the **Select Label** button on the lower left corner of the dialog to view the available label templates if the dialog does not appear as shown to the right.
- Highlight CD/DVD Printers in the Media Type column.
- Highlight Microboards in the center Manufacturer column.
- Select from the options listed in the Label Type column.



We recommend that you use the 17mm inner hole template to ensure that your image will fully cover the printable surface on both hub printable and non-hub printable media, adjusting the Diameter Settings when changing between media types (see page 14).

6. Click **OK** to begin designing the label.

Printing Labels

Select **Print** from the File menu while the label you want to print is open. Be sure that you have selected the Microboards PF-Pro and that **CD/DVD Printer** is selected in the Print Using field before clicking the **Print** button.



If you are printing more than one copy of a label, enter in the number you wish to print before clicking the **Print** button.

The MX Disc Publisher Software

Your MX Disc Publisher will use Microboards PrintWrite as the Disc Publishing software. If your PC has Windows XP (Service Pack 2 minimum required) or Windows Vista as the Operating System, PrintWrite will be installed as the default disc publishing software.

All printing and burning must be done using PrintWrite.

Microboards PrintWrite

PrintWrite is not supported on any PC running Windows 2000 as the Operating System.

The first time you launch PrintWrite, you will be asked to confirm the configuration of the MX Disc Publisher system. This only needs to be done the first time the software is used, or if there is a change to your hardware.

Please refer to the Microboards PrintWrite User's Manual for more information on configuring and operating PrintWrite.

Software Re-Installation

The information in this section will only apply to a manual re-installation of the individual software packages. If you have not yet installed the MX Disc Publisher using the Installer, it is recommended that you do so. Installing the MX Disc Publisher in an incorrect order could result in an unsuccessful installation.

Disc Publishing Software Re-Installation

PrintWrite is not supported on any PC running Windows 2000 as the Operating System.

There are 3 methods of reinstalling the Disc Publishing software should the need arise:

A. (Recommended) Insert the Microboards MX Disc Publisher Installation CD into the CD/DVD ROM drive on your computer and select the Repair option when the installer starts. Click the Disc Publishing Software button to reinstall PrintWrite Disc Publishing software. Clicking the Install All Applications button will reinstall the PrintWrite Disc Publishing software, SureThing, and the Toolbox.

Using this method of reinstallation will automatically reinstall the correct software for your Operating System.

Follow the prompts to install the PrintWrite Disc Publishing software.

- B. The PrintWrite Disc Publisher installer is also located on the Installation CD. To manually reinstall PrintWrite, browse to the **Applications\PrintWrite** directory on the Installation CD and run **setup.exe**.
- C. The PrintWrite Disc Publisher software installer was also added to your hard drive in the event that you need to reinstall but do not have access to the Installation CD. Browse to the C:\Program Files\Microboards\MX Installer\Applications directory on your hard drive and double-click setup.exe to reinstall PrintWrite.

PF Pro Series Toolbox Re-Installation

The Microboards PF Pro Series Toolbox will be installed automatically during the initial installation of the MX Disc Publisher from the Installation CD. The Toolbox installation is hidden at that time, but the successful installation of the Toolbox can be verified by the presence of the Toolbox icon in the tool tray in the lower right corner of your Windows desktop.

- 1. Load the MX Disc Publisher Installation CD.
- 2. Select the **Repair** option when the installer starts.

Toolbox Icon in Tool Tray

Note: If you have removed the MX Disc Publisher Installation by selecting the **Remove** option in the installer or by using the entry in the **Add or Remove Programs** window, the installation will run completely without the Repair option.



- 3. Click the **Microboards PF Pro Series Toolbox** button to re-install the Toolbox or the **Install Both Applications** button to reinstall both SureThing Disc Labeler and the Toolbox.
- 4. Once the re-installation is complete, the toolbox will be started automatically, minimizing into the tool tray.

SureThing Labeler Software Re-Installation

There are 3 methods of reinstalling SureThing should the need arise:

A. *(Recommended)* Insert the Microboards MX Disc Publisher Installation CD into the CD/DVD ROM drive on your computer and select the **Repair** option when the installer starts. Click the **SureThing Disc Labeler** button to reinstall SureThing. Clicking the **Install All Applications** button will reinstall the Disc Publishing software, SureThing, and the Toolbox.

Follow these steps once the SureThing installer launches:



Click **Next** to continue.



 Once the User License screen appears, select I Accept and click the Next button.



If you wish to change the default Install directory, it can be done here. Click Next when completed.



Click **Next** to add a shortcut in the Start Menu.



- Choose to add an icon to your desktop and/or a folder in the Start Menu. Once selected, click Next.
- Click **Install** to begin copying the files.



- 7. Remove the check to launch SureThing at this time, then click **Finish**.
- B. Alternately, you can open the **Applications** directory on the Installation CD and run **SureThing.exe** to install SureThing manually. Follow the on-screen instructions as shown in steps 1-7 above.
- C. The SureThing installer was also added to your hard drive in the event that you need to reinstall but do not have access to the Installation CD. Run SureThing.exe in the C:\Program Files\Microboards\MX Installer\Applications directory on your hard drive. Follow the on-screen instructions as shown in steps 1-7 above.

Troubleshooting

Printer not printing

- 1. Confirm the MX Disc Publisher is plugged into a power source and is turned on. The ON/OFF switch is located at the back of the unit, above the power cable connector.
- Confirm the green LED on the power button is lit on the front panel, as shown below. If AC power is on and the green LED is off, press the power button and wait for several seconds. If the LED still does not come on, contact Microboards Technical Support.



3. Confirm the MX Disc Publisher is connected to the computer, with a USB cable. This can be checked by clicking on Start, going to Settings and selecting Printers. Confirm the printer is listed and is active. If the icon is not active, make sure the Use Printer Offline is not selected or paused. Also check to make sure the correct printer port is selected.

Disc Loading error

- 1. If a disc is not loaded correctly, an error message will be displayed on your PC. Check to see if there are any discs on the belt. Remove any discs that are left on the belt.
- Lift the cover and check for any discs on the front deck of the MX Disc Publisher. Remove any discs found on the belts. Close the cover.
- Next, reload the input bin and click the OK button on the error message to continue. The system will load the next disc and continue printing the remaining discs for that job.

Low Ink indication

The Microboards Toolbox will provide you with a warning when any of the ink cartridges are running low. The warning will tell you which cartridge is running low.

It is strongly recommended that you replace the cartridge before the ink level reaches 0%. Continuing to run the MX Disc Publisher with an empty cartridge may damage the printer.

If you notice poor ink quality or a missing color in your prints at any time, replace the ink cartridge.

Out of Ink

If you do not change the cartridge when the Low Ink warnings first appear, you will become unable to print after the ink cartridge shows 0%. Printing will be halted to avoid damaging the printheads or printer.

The Out of Ink message will appear when the ink levels have been at 0% for a time. At that point, you have the option of changing the cartridge and continuing, or cancelling the job.



You will not be able to print if the empty cartridge is not replaced once the Out of Ink message appears.

Gaps or Overlap in Ink Coverage

There are 2 possible causes:

- 1. If the gaps or overlaps are widely spaced, you may be printing in Draft Mode. Change Mode to Text & Graphics or Photo. See page 12 for details.
- 2. The printheads need to be realigned. Please refer to page 15 for details.

"No Printers Connected" Message

The Microboards Printer Toolbox did not detect a connected printer when the PC was started. Verify that the MX Disc Publisher is connected and that the printer is powered on.

After verifying the connection and the printer power, you should restart the Toolbox, as it monitors the printer's ink levels and door status.

A shortcut to the **PF Pro Toolbox** was placed in the Microboards directory of the Start Menu during installation. The Toolbox will start, but will automatically minimize to the tooltray. Double-click the Toolbox icon in the tooltray to access the Toolbox.





Supported Formats

Recording format	CD	CD-ROM Mode 1, CD-ROM XA Mode 2 (form 1, form 2), Photo CD, CD-DA (Audio CD), CD-Extra, CD-R, CD-RW
	DVD	DVD-ROM, DVD-+R/RW/DL, DVD-VIDEO
Recording capacity (nominal)	CD	700MB
	DVD	4.7GB for General DVD
		8.3GB for Dual Layer
Applicable media	CD	CD-R, CD-RW
	DVD	DVD-+R, DVD-+RW, DVD-+R DL

Specifications

DVD Recorder Drive: DVD-+R/RW/DL CD-R/RW Recorder

Power Supply: Auto Detect AC Power: 90VAC – 240VAC, 47Hz – 63Hz

Weight: MX-1: 58 lbs; MX-2: 63 lbs.

Connectivity: USB 2.0 required

Warranty: One Year Limited Warranty

Media Types: Printable-surface 120mm CD-R/RW or DVD+-R/RW/DL

Printer:

Print Technology: HP Inkjet

Print Quality, Black: 600 x 600 dpi

Print Quality, Color: up to 4800 x 1200 optimized dpi

Print Speed: Depends upon percentage of coverage and print mode selected
 Approx. 45 seconds for 100% full-color coverage, Photo Normal Mode

- Approx. 20 seconds for 100% full-color coverage, Text & Graphics Best Mode
- Approx. 12 seconds for 20% coverage Text & Graphics Normal Mode
- Approx. 6 seconds for 100% full coverage Draft Normal Mode

Maximum Print Width: 4.72" (120mm)

Ink Cartridges: Microboards PFP-HC-CYAN, PFP-HC-MAGENTA, PFP-HC-YELLOW, and

PFP-HC-BLACK

Label Editing Software: SureThing™ First Edition Software for Windows included

Technical Support

www.microboards.com

For technical questions or support issues, contact Microboards Technology technical support:

United States
PH: 952-556-1639
FAX: 952-556-1628
support@microboards.com

PH: +44 (0) 845 230 7800 www.microboards.co.uk

Europe

Japan PH: 03-3561-2266 www.microboards.co.jp

Please have the Model and Serial Number of your MX Disc Publisher available when contacting Technical Support.

The modified optical recorder being used in this device has been recertified to IEC/EN 60825-1 and found to comply with the limits of a class 1 laser product.



Any unauthorized modification to this equipment may result in the revocation by the FCC of the user's authority to operate this equipment.

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna
- Increase the separation between the equipment and antenna
- Connect the equipment into an outlet on a circuit different than that to which the receiver is connected
- Consult the dealer or an experienced radio/TV technician for help



This product is in conformity with the EMC Directive (89/336/EEC) through compliance with the following European standards: EN 55022, EN 55024. The CE mark has been affixed in accordance with the CE Marking Directive 93/68/EEC.

Canadian Department of Communications (DOC) Statement

This Class B digital apparatus complies with the Canadian ICES-003 Issue 4:2004. Cet appareil numerique de la classe B est conforme a la norme NMB-003 du Canade.